

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently Amended) A method for testing [[the]] a compatibility of software modules, the method comprising computer implemented steps of:
  - responsive to receiving a request to install a new software module in a data processing system, performing an inventory on an existing set of software modules resident in the data processing system;
  - referring to a knowledge base of software modules to determine whether the new software module is known to function compatibly with each software module in the existing set of software modules;
  - responsive to a determination that the new software module is not known to function compatibly with each software module in the existing set of software modules, determining whether to test the new software module in a test data processing system in combination with the existing set of software modules;
  - responsive to a determination to test the new software module in the test data processing system in combination with the existing set of software modules, identifying an operating environment of the data processing system;
  - installing the new software module, the identified environment, and the existing set of software modules on the test data processing system;
  - testing the new software module in combination with the existing set of software modules on the test data processing system;
  - responsive to a test result indicating that the new software module is compatible with the existing set of software modules, adding a new combination indicating the compatibility to the knowledge base; and
  - installing the new software module in the data processing system.

2. (Previously Presented) The method of claim 1, wherein determining whether to test the new software module in a test data processing system in combination with the existing set of software modules comprises:  
prompting a user for a selected input.
3. (Previously Presented) The method of claim 2, further comprising:  
receiving a first selected input from the user that indicates installing the new software module in the data processing system.
4. (Previously Presented) The method of claim 1, further comprising:  
responsive to a determination that the new software module is not compatible with each software module in the existing set of software modules, adding a new combination indicating the incompatibility to the knowledge base;  
notifying the user that the new software module is not compatible with the existing set of software modules; and  
prompting the user for an input.
5. (Previously Presented) The method of claim 1, further comprising:  
responsive to a determination that the new software module is not compatible with each module in the existing set of software modules, adding a new combination indicating the incompatibility to the knowledge base and searching the knowledge base to find a closest match, wherein at least one of the existing modules is removed or replaced with a different version;  
prompting for the user as to availability of the closest match combination; and  
responsive to a user input, installing the new software module and changing the existing set of modules as needed to obtain a compatible combination.
6. (Canceled)
7. (Previously Presented) The method of claim 4, wherein the input indicates one of installing the new software module in the data processing system and not installing the new software module in the data processing system.

8.-19. (Canceled)

20. (New) An apparatus for testing a compatibility of software versions, the apparatus comprising:

- a bus;

- a storage device connected to the bus, wherein the storage device contains a computer usable program product, and wherein the computer usable program product contains a plurality of instructions; and

- a processor unit connected to the bus, wherein the plurality of instructions causes the processor unit to perform steps comprising:

- responsive to receiving a request to install a new software module in a data processing system, performing an inventory on an existing set of software modules resident in the data processing system;

- referring to a knowledge base of software modules to determine whether the new software module is known to function compatibly with each software module in the existing set of software modules;

- responsive to a determination that the new software module is not known to function compatibly with each software module in the existing set of software modules, determining whether to test the new software module in a test data processing system in combination with the existing set of software modules;

- responsive to a determination to test the new software module in the test data processing system in combination with the existing set of software modules, identifying an operating environment of the data processing system;

- installing the new software module, the identified environment, and the existing set of software modules on the test data processing system;

- testing the new software module in combination with the existing set of software modules on the test data processing system;

- responsive to a test result indicating that the new software module is compatible with the existing set of software modules, adding a new combination indicating the compatibility to the knowledge base; and

installing the new software module in the data processing system.

21. (New) The apparatus of claim 20, wherein determining whether to test the new software module in a test data processing system in combination with the existing set of software modules comprises:

prompting a user for a selected input.

22. (New) The apparatus of claim 21, wherein the plurality of instructions further causes the processor unit to perform steps comprising:

receiving a first selected input from the user that indicates installing the new software module in the data processing system.

23. (New) The apparatus of claim 20, wherein the plurality of instructions further causes the processor unit to perform steps comprising:

responsive to a determination that the new software module is not compatible with each software module in the existing set of software modules, adding a new combination indicating the incompatibility to the knowledge base;

notifying the user that the new software module is not compatible with the existing set of software modules; and

prompting the user for an input.

24. (New) The apparatus of claim 20, wherein the plurality of instructions further causes the processor unit to perform steps comprising:

responsive to a determination that the new software module is not compatible with each module in the existing set of software modules, adding a new combination indicating the incompatibility to the knowledge base and searching the knowledge base to find a closest match, wherein at least one of the existing modules is removed or replaced with a different version;

prompting for the user as to availability of the closest match combination; and

responsive to a user input, installing the new software module and changing the existing set of modules as needed to obtain a compatible combination.

25. (New) The apparatus of claim 23, wherein the input indicates one of installing the new software module in the data processing system and not installing the new software module in the data processing system.

26. (New) A computer program product comprising:

a computer readable storage medium having a computer usable program code for testing a compatibility of a software modules, the computer usable program code causing the computer to perform steps comprising:

responsive to receiving a request to install a new software module in a data processing system, performing an inventory on an existing set of software modules resident in the data processing system;

referring to a knowledge base of software modules to determine whether the new software module is known to function compatibly with each software module in the existing set of software modules;

responsive to a determination that the new software module is not known to function compatibly with each software module in the existing set of software modules, determining whether to test the new software module in a test data processing system in combination with the existing set of software modules;

responsive to a determination to test the new software module in the test data processing system in combination with the existing set of software modules, identifying an operating environment of the data processing system;

installing the new software module, the identified environment, and the existing set of software modules on the test data processing system;

testing the new software module in combination with the existing set of software modules on the test data processing system;

responsive to a test result indicating that the new software module is compatible with the existing set of software modules, adding a new combination indicating the compatibility to the knowledge base; and  
installing the new software module in the data processing system.

27. (New) The computer program product of claim 26, wherein determining whether to test the new software module in a test data processing system in combination with the existing set of software modules comprises:

prompting a user for a selected input.

28. (New) The computer program product of claim 27, wherein the computer usable program code further causes the computer to perform steps comprising:

receiving a first selected input from the user that indicates installing the new software module in the data processing system.

29. (New) The computer program product of claim 26, wherein the computer usable program code further causes the computer to perform steps comprising:

responsive to a determination that the new software module is not compatible with each software module in the existing set of software modules, adding a new combination indicating the incompatibility to the knowledge base;

notifying the user that the new software module is not compatible with the existing set of software modules; and

prompting the user for an input.

30. (New) The computer program product of claim 26, wherein the computer usable program code further causes the computer to perform steps comprising:

responsive to a determination that the new software module is not compatible with each module in the existing set of software modules, adding a new combination indicating the incompatibility to the knowledge base and searching the knowledge base to find a closest match, wherein at least one of the existing modules is removed or replaced with a different version;

prompting for the user as to availability of the closest match combination; and

responsive to a user input, installing the new software module and changing the existing set of modules as needed to obtain a compatible combination.

31. (New) The computer program product of claim 29, wherein the input indicates one of installing the new software module in the data processing system and not installing the new software module in the data processing system.